OBJECTIVE LENS AND METHOD FOR MANUFACTURE THEREOF

BACKGROUND OF THE INVENTION

The present invention relates to an objective lens used for at least recording or reproducing high-density optical recording medium such as the so-called optical disks. In particular, the present invention relates to an objective lens for recording and reproducing high-density optical information using a short wavelength light source and manufacturing method therefor.

CD (compact disks) that have been widely used as optical recording medium are employed mainly in a numerical aperture range of 0.45-0.5. Furthermore, DVD (digital versatile disks) conduct optical information recording in a numerical aperture (NA) range of 0.6-0.65 by using a light source with a wavelength of 650-780 nm.

However, as a need for increased capacity has been generated, a demand arose for high-density optical information recording medium capable of recording with a higher recording density and optical systems for such recording and reproduction. Accordingly a demand for higher NA was created in the field of objective lenses used for such applications, that is, in the optical systems for recording and reproducing with such high-density optical information recording media.